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10/043,478	01/10/2002	Christopher J. Frantz	COMP:0278 P01-4017	6440

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EXAMINER

VITAL, PIERRE M

ART UNIT	PAPER NUMBER
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2188

DATE MAILED: 03/08/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/043,478

**Applicant(s)**

FRANTZ ET AL.

**Examiner**

Pierre M. Vital

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

1. This Office Action is in response to applicant's communication filed January 15, 2004 in response to PTO Office Action mailed November 5, 2003. The Applicant's remarks and amendments to the claims and/or the specification were considered with the results that follow.
2. Claims 1-24 have been presented for examination in this application. In response to the last Office Action, claims 1, 10, 18, 19, and 21-23 have been amended. No claims have been canceled or added. As a result, claims 1-24 are now pending in this application.
3. The objection of claims 1 and 18 has been withdrawn due to the amendment filed January 15, 2004.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1, 3, 4, 6-8, 10, and 14-17 are rejected under 35 U.S.C. 102(a) as being anticipated by Wambach et al (US6,330,648).

As per claim 1, Wambach discloses a method of automatically identifying a write protect status of a computer diskette, comprising the acts of interacting with the

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computer diskette to produce a failure code indicative of the write protect status [*value of protected sector bit is sensed before permitting writing to that sector*; col. 2, lines 4-6; *specified address is compared with list of protected memory locations for each write request*; col. 4, lines 23-27]; the computer diskette being removable and rewritable [*mass memory 120 may be a removable disk*; col. 3, lines 52-55; *a legal write request is passed to the drive control circuitry*; col. 6, lines 10-14]; and identifying the write protect status of the computer diskette based on the failure code [*a flag value of "1" by the write protection code implemented as programmed microprocessor with its program stored to prevent writing to that sector*; col. 2, lines 6-12; *if a match is found, write operation is aborted*; col. 4, lines 27-36; abstract].

As per claim 3, Wambach discloses the act of interacting with the computer diskette comprises the act of interacting with a non-storage area of the computer diskette [*write protection circuit code implemented as programmed microprocessor with its program stored to respond to a request to write to a protected mass memory location*; col. 2, lines 41-43; abstract].

As per claim 4, Wambach discloses the act of interacting with the non-storage area comprises the act of attempting to write data to the non-storage area [*request to write to a protected mass memory location*; col. 2, lines 41-43].

As per claim 6, Wambach discloses the act of interacting with the computer diskette to produce the failure code comprises the act of generating a write protect failure code if the write protect status of the computer diskette is write protected [*an illegal command is sent to the mass memory and an error signal (or illegal command) is issued back to the computer in response to a write to a protected mass memory location*; col. 2, lines 41-45].

As per claim 7, Wambach discloses the acts of interacting with the computer diskette and identifying the write protect status are performed upon receipt of an access request to the computer diskette [*a request to write to a protected mass memory location causes an illegal command to be sent to the mass memory and an error signal issued back to the computer*; col. 2, lines 41-45].

As per claim 8, Wambach discloses the act of receiving the access request from a remote computer [*interface card 110 installed between computer and mass memory is at a remote location*; Fig. 2; col. 2, lines 36-40].

As per claim 10, Wambach discloses a method of identifying a write protect status of a removable media, comprising the acts of seeking to a non-storage location beyond the storage area of the removable media [*software or irreplaceable data are stored in a list of protected memory locations with which each write request is compared*; col. 1, lines 41-48; col. 3, line 60 – col. 4, line 22]; attempting to write data to the removable media at the non-storage location [*write to the list of protected locations provides a match*; col. 4, lines 23-30]; evaluating a failure code produced by the attempted write [*a flag value of "1" by the write protection code implemented as programmed microprocessor with its program stored to prevent writing to that sector*; col. 2, lines 6-12]; and identifying the write protect status of the removable media based on the failure code [*if a match is found, write operation is aborted*; col. 4, lines 27-36].

As per claim 14, Wambach discloses the acts of seeking, attempting to write data evaluating the failure code, and identifying the write protect status are initiated by a

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remote computer [*interface card 110 installed between computer and mass memory is at a remote location; Fig. 2; col. 2, lines 36-40*].

As per claim 15, comprising processing an access request from the remote computer for access to the removable media [*write protection circuit responds to a request to write to a protected mass memory location; col. 2, lines 41-43*].

As per claim 16, Wambach discloses the act of attempting to write data causes the failure code to be a write protect error if the write protect status of the removable media is write protected [*an error signal is issued back to the computer in response to a write to a protected mass memory location; col. 2, lines 41-45*].

As per claim 17, Wambach discloses the act of attempting to write data causes the failure code to be an invalid write error if the write protect status of the removable media is not write protected [*an illegal command is sent to the mass memory in response to a write to a protected mass memory location; col. 2, lines 41-45*].

6. Claims 1, 10, 18, 19 and 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by MacLeod (US6,598,135).

As per claim 1, MacLeod discloses a method of automatically identifying a write protect status of a computer diskette, comprising the acts of interacting with the computer diskette to produce a failure code indicative of the write protect status [*data to a sector can be read many times; col. 2, lines 26-28; overwrite of a previously written sector is*

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*prevented; col. 6, lines 14-23]; the computer diskette being removable and rewriteable [DVD-RAM can be removed; col. 3, lines 18-20; rewriting of a previously written sector is allowed; col. 4, lines 58-61]; and identifying the write protect status of the computer diskette based on the failure code [the sector is write protected if Write Protect Flag and Sector Written Flag match, an error code is returned to the Host; col. 7, lines 7-13].*

As per claim 10, MacLeod discloses a method of identifying a write protect status of a removable media, comprising the acts of seeking to a non-storage location beyond a storage area of the removable media *[sector is written and cannot be overwritten; col. 6, lines 14-23]; attempting to write data to the removable media at the non-storage location [preventing overwriting of a previously written sector; col. 6, lines 14-23]; evaluating a failure code produced by the attempted write [the sector is write protected if Write Protect Flag and Sector Written Flag match, an error code is returned to the Host; col. 7, lines 7-13]; and identifying the write protect status of the removable media based on the failure code [the sector is write protected if Write Protect Flag and Sector Written Flag match; col. 7, lines 7-13].*

As per claim 18, MacLeod discloses a method of identifying a write protect status of a removable rewriteable media, comprising the acts of reading data from the removable rewriteable media at a storage location *[data to a sector can be read many times; col. 2, lines 26-28]; attempting to write the data back to the removable rewriteable media [overwrite of a previously written sector is prevented; col. 6, lines 14-23]; and identifying*

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the write protect status of the removable rewriteable media as write protected if a write protect error code is observed [*the sector is write protected if Write Protect Flag and Sector Written Flag match, an error code is returned to the Host*; col. 7, lines 7-13].

As per claim 19, MacLeod discloses the acts of reading data, attempting to write the data, and identifying the write protect status are initiated automatically upon insertion of the removable media into a media drive [*a method of write protection is illustrated which starts upon insertion of the optical disk in the drive, where the drive reads the physical format information, Figs. 3A, 3B; col. 6, lines 44-65*].

As per claim 22, MacLeod discloses the act of attempting to write the data causes the write protect failure code if the removable media is write protected [*if the sector is write-protected, an error code is returned*; col. 7, lines 9-13].

As per claim 23, MacLeod discloses the act of attempting to write the data succeeds if the removable media is not write-protected [*if the Write Protect Flag is not set, the sector is empty, write operations to the sector shall be allowed*; col. 7, lines 14-16].

As per claim 24, MacLeod discloses the act of attempting to write the data comprises the act of attempting to rewrite the data over the data existing at the storage location [*overwriting of a previously written sector*; col. 6, lines 14].



***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 5, 9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wambach et al (US6,330,648) and MacLeod (US6,598,135).

As per claims 2, 11 and 12, Wambach discloses the claimed invention as detailed above in the previous paragraphs. However, Wambach does not specifically teach the act of identifying a media type and storage area of the computer diskette as recited in the claim.

MacLeod discloses the act of identifying a media type and storage area of a computer diskette [*the drive reads the media type and the sector written flag (SWF)*; col. 6, lines 44-65].

It would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and MacLeod before him at the time the invention was made, to modify the system of Wambach to include the act of identifying a media type and storage area of a computer diskette because it would have provided a reliable method of protecting data by generating an error message and no further processing will be allowed until a valid media type is placed in the drive [col. 2, lines 9-10; col. 6, lines 51-54] as taught by MacLeod.

As per claim 5, Wambach discloses the claimed invention as detailed above in the previous paragraphs. However, Wambach does not specifically teach the act of interacting with the computer diskette comprises the acts of reading data from a storage location of the computer diskette; and attempting to write the data back to the computer diskette as recited in the claim.

MacLeod discloses the act of interacting with a computer diskette comprises the acts of reading data from a storage location of the computer diskette [*data to a sector can be read many times*; col. 2, lines 26-28]; and attempting to write the data back to the computer diskette [*the sector is write protected if Write Protect Flag and Sector Written Flag match, an error code is returned to the Host*; col. 7, lines 7-13].

It would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and MacLeod before him at the time the invention was made, to modify the system of Wambach to include the act of interacting with a computer diskette comprises the acts of reading data from a storage location of the computer diskette; and attempting to write the data back to the computer diskette because it would have provided a lower level of write protection by allowing the storage and retrieval of data to/from the diskette in a manner consistent with the standard for DVD-RAM [col. 3, lines 5-6, 38-40] as taught by MacLeod.

As per claims 9 and 13, Wambach discloses the claimed invention as detailed above in the previous paragraphs. However, Wambach does not specifically teach the acts of interacting with the computer diskette and identifying the write protect status are performed automatically upon insertion of the computer diskette into a disk drive as recited in the claim.

MacLeod discloses the acts of interacting with a computer diskette and identifying a write protect status are performed automatically upon insertion of the computer diskette into a disk drive [*a method of write protection is illustrated which starts upon insertion of the optical disk in the drive, where the drive reads the physical format information, Figs. 3A, 3B; col. 6, lines 44-65*].

It would have been obvious to one of ordinary skill in the art, having the teachings of Wambach and MacLeod before him at the time the invention was made, to modify the system of Wambach to include the acts of interacting with a computer diskette and identifying a write protect status are performed automatically upon insertion of the computer diskette into a disk drive because it would have provided a reliable method of protecting data by generating an error message and no further processing will be allowed until a valid media type is placed in the drive [col. 2, lines 9-10; col. 6, lines 51-54] as taught by MacLeod.

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9. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacLeod (US6,598,135) and Wambach et al (US6,330,648).

As per claim 20 and 21, MacLeod discloses the claimed invention as detailed above in the previous paragraphs. However, MacLeod does not specifically teach the acts of reading data, attempting to write the data, and identifying the write protect status are initiated by a remote computer; and processing an access request from the remote computer for access to the removable media as recited in the claims.

Wambach discloses the acts of reading data, attempting to write the data, and identifying the write protect status are initiated by a remote computer [*interface card 110 installed between computer and mass memory is at a remote location*; Fig. 2; col. 2, lines 36-40]; and processing an access request from the remote computer for access to the removable media [*write protection circuit responds to a request to write to a protected mass memory location*; col. 2, lines 41-43].

It would have been obvious to one of ordinary skill in the art, having the teachings of MacLeod and Wambach before him at the time the invention was made, to modify the system of MacLeod to include the acts of reading data, attempting to write the data, and identifying the write protect status are initiated by a remote computer; and processing an access request from the remote computer for access to a removable media because it would have provided a computer which is impervious to unauthorized or accidental overwriting of key sectors by providing a computer not susceptible to tampering by a computer virus stored in the mass memory [col. 1, lines 32-38] as taught by Wambach.

***Response to Arguments***

10. Applicant's arguments filed January 15, 2004 have been fully considered but they are not persuasive.

The newly added limitation introduced into the independent claims does not affect the scope of the rejection because the recitation that "the computer diskette is removable and rewriteable" does not remove the reference from reading upon the claims because the system of Wambach provides for a removable media in column 3, lines 52-55 and a rewriteable medium in column 6, lines 10-14 and does not constitute the novelty of applicants invention. Note that Wambach discloses that the mass memory 120 may be a removable disk drive; and that a legal write or write not directed to a protected mass memory location (to prevent unauthorized or accidental overwriting) passes along the drive control circuitry 130.

The system of MacLeod also provides for a removable media in column 3, lines 18-20 and a rewriteable medium in column 4, lines 58-61. Note that MacLeod discloses the DVD-RAM media can be removed; and that the rewriting of a previously written sector is allowed.

As to the remarks, Applicants asserted that:

(a) MacLeod does not disclose identifying the write protection status of a computer diskette based on the failure code.

Examiner respectfully traverses applicants' arguments for the following reasons. Examiner would like to point out that MacLeod discloses an error code or failure code is

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sent to the Host if the sector is write-protected (i.e., if a Write Protect Flag and a Sector Written Flag match). By receiving this error code, the Host clearly checks the status of the write protection status of the diskette.

(b) MacLeod does not disclose seeking beyond a storage area to a non-storage area.

Examiner respectfully traverses applicants' arguments for the following reasons. Examiner would like to point out that MacLeod discloses preventing overwrite of a previously written sector as detailed in column 6, line 13. Thus, MacLeod discloses that once a sector is written, it is considered a non-storage location since all writes to that sector will be prevented.

(c) MacLeod does not disclose reading data and attempting to write the same data back to a removable rewriteable media.

Examiner respectfully traverses applicants' arguments for the following reasons. Examiner would like to point out that although MacLeod discloses the use of a DVD-WORM disk, the reference concurrently discloses the use of a DVD-RAM disk. Although Examiner agrees with applicant that data cannot be read and written back in a DVD-WORM disk, the same does not hold true for a DVD-RAM. Note that MacLeod discloses that rewriting of previously written sectors is allowed in DVD-RAM disk as detailed in column 4, lines 58-61.

***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre M. Vital whose telephone number is (703) 306-5839. The examiner can normally be reached on Mon-Fri, 8:30 am - 6:00 pm, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (703) 306-2903. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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3/4/04

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Pierre M. Vital  
Art Unit 2188  
February 24, 2004